

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A radar system comprising:
a head containing a radar transmitter and a radar receiver and configured to be closely associated with a radar antenna; and
a signal processing unit included with said head for processing a received radar signal ~~signals~~ and for combining the received radar signal ~~signals~~ with data from at least one ~~other source sources~~ and configured to simultaneously process the received radar signal and output radar data in at least two different digital formats ~~multiple output data feeds for use by at least one display unit.~~
2. (Canceled)
3. (Currently Amended) A radar system as claimed in claim 1, ~~wherein the output data feeds include~~ also arranged to output a raw radar signal ~~and a processed radar signal.~~
4. (Currently Amended) A radar system as claimed in claim 1, wherein the signal processing unit simultaneously outputs radar data ~~signals~~ for differing radar ranges.
5. (Previously Presented) A radar system as claimed in claim 1, wherein the signal processing unit is controllable by digital input signals.
6. (Previously Presented) A radar system as claimed in claim 1, wherein the signal processing unit receives control signals for the radar receiver and the radar transmitter.
7. (Canceled)
8. (Previously Presented) A radar system as claimed in claim 1, wherein a north heading signal is combined with the received radar signals to allow synchrony with other data feeds.

9. (Canceled)
10. (Previously Presented) A radar system as claimed in claim 1, wherein all signal processing is carried out digitally.
11. (Previously Presented) A radar system as claimed in claim 1, wherein the radar transmitter is controllable by digital signals from the signal processing unit.
12. (Currently Amended) A radar system as claimed in claim 1, wherein the output data digital formats ~~feeds~~ are to a standard specification.
13. (Previously Presented) A radar system as claimed in claim 1, wherein the output data feeds are encoded in USB, Firewire, Bluetooth or Ethernet protocol.
14. (Canceled)
15. (Previously Presented) A radar system as claimed in claim 1, wherein the output data feeds are distributed wirelessly.
16. (Previously Presented) A radar system as claimed in claim 1, in combination with a digital display unit which facilitates selection of one or more of the output data feeds from those provided by the radar system.
17. (Previously Presented) A radar system as claimed in claim 1, in combination with a digital display unit wherein the digital display unit has inputs allowing remote control of the radar transmitter, the receiver or the signal processing unit.
18. (New) A radar system according to claim 1, wherein said data from at least one other source includes GPS data.

19. (New) A radar system according to claim 1, wherein said data from at least one other source is combined with the radar data by multiplexing.

20. (New) A radar system according to claim 1, wherein said output radar data in at least two digital formats comprises any two or more of a decluttered signal, a moving target signal, a range ring signal, and a map signal.